

S4-1.10

Modern Devices and Tools for the Cornea Collection and Processing. Synthesis of Literature

A. Cociug¹, O. Macagonova², V. Cusnir Jr.³, V. Cusnir³ and V. Nacu²

¹ *Human Tissue Bank, Chisinau, Republic of Moldova.*

² *Laboratory of Tissue Engineering and Cells Culture, State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova.*

³ *Department of Ophthalmology and Optometry, "Nicolae Testemitanu" State University of Medicine and Pharmacy, Chisinau, Republic of Moldova*

The devices and tools used in the cornea sampling and processing is and will be one of the requirements used by the Eye Bank. Technological and informational progress tends to modernize all types of the devices that lead to increased quality of the cornea giving a longer storage with the of the viability of all epithelial corneal layers, stromal and endothelial. Bioreactors are complex devices that maintain the storage of the cornea *ex vivo* that are closer to the physiological norm. Many studies show that the materials that are made of these devices directly or indirectly influence the activity of the cells.